

Threatened, Endangered, and Sensitive Species Profile



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LA-UR-96-1269

FOREWORD

This document is intended to provide a thumbnail description of various plant and animal species that are included in lists on the federal, state, or local level proclaiming them to be at risk to some degree and that may inhabit or potentially inhabit areas in and around Los Alamos National Laboratory lands.

At the top of each profile is the category for the current status of each organism. This status will range from federal endangered, which designates the most serious condition for an organism, to species of local concern, which identifies an organism that is noted to be rare on a local level. The different labels of status are defined as follows:

- **Federal endangered** — Any species that is in danger of extinction throughout all or a significant portion of its range.
- **Federal threatened** — Any species that is likely to become endangered within the foreseeable future throughout all or a significant portion of its range.
- **Federal species of concern** — Any species whose population numbers are declining or whose range is diminishing to the point where it may become threatened in the near future.
- **State endangered** — Any species listed in the New Mexico state endangered list because it is rare in numbers and/or occurrences and, without protection, its further existence in the state is in serious jeopardy.
- **State threatened** — Any species whose prospects of survival or recruitment within the state are likely to become jeopardized in the near future.
- **Species of local concern** — Any species known to exist or potentially exist within the proximity of Los Alamos National Laboratory lands and surrounding areas that are rare in numbers and/or occurrences and whose habitat requirements are very specific, rare to this area, or threatened in any way.

The nature of this document allows for updates to be made to species that are already included in this list as new information becomes available. At the same time we will be able to add new species to this profile as they become a part of a category listed in the status section and delete any species that have been removed from any of these designations.



MEXICAN SPOTTED OWL

Strix occidentalis lucida

Status:

Federal threatened.

Description:

The Mexican spotted owl is one of three subspecies of spotted owl—Mexican, California, and Northern. This strictly nocturnal bird is fairly large, 42 to 53 cm (16.5 to 21 in.) tall. It is dark brown with a puffy head and has white spots on its head, back, and chest and barred underparts. Unlike most other owls, the Mexican spotted owl is dark-eyed rather than yellow-eyed.

Habitat:

Mixed Conifer, Ponderosa Pine. The Mexican spotted owl prefers tall, old-growth forests in canyons and moist areas for breeding. It will forage

for woodrats and mice in forests, woodlands, and rocky areas.

Occurrence:

The Mexican spotted owl is a resident and has been confirmed on Los Alamos National Laboratory, Los Alamos County, Bandelier National Monument, and Santa Fe National Forest lands. Critical habitat has been designated in Santa Fe National Forest.



Courtesy of New Mexico Game and Fish

BLACK-FOOTED FERRET

Mustela nigripes

Status:

Federal endangered.

Description:

The weasel family, of which the black-footed ferret is a member, is the smallest of a group of predators that are different sizes but are similar in shape and habits. The black-footed ferret has a long body, 38 to 46 cm (15 to 18 in.), with a 13- to 15-cm (5- to 6-in.) long tail. This weasel can be identified by its yellowish brown to darker colored fur, black forehead, black-tipped tail, and black feet.

Habitat:

Prairie. The main prey of the black-footed ferret is the prairie dog. Hence, this weasel-like animal will not stray far from a prairie dog town. However, it may also occur in other areas where other rodents, small enough to be taken, abound.

Occurrence:

The presence of the black-footed ferret on Los Alamos National Laboratory and Los Alamos County lands or surrounding uplands is believed to be highly unlikely.



Courtesy of US Fish and Wildlife Service



WOOD LILY

Lilium philadelphicum var. *andinum*

Status:

Species of concern, State endangered.



Courtesy of Teralene Foxx, LANL

Description:

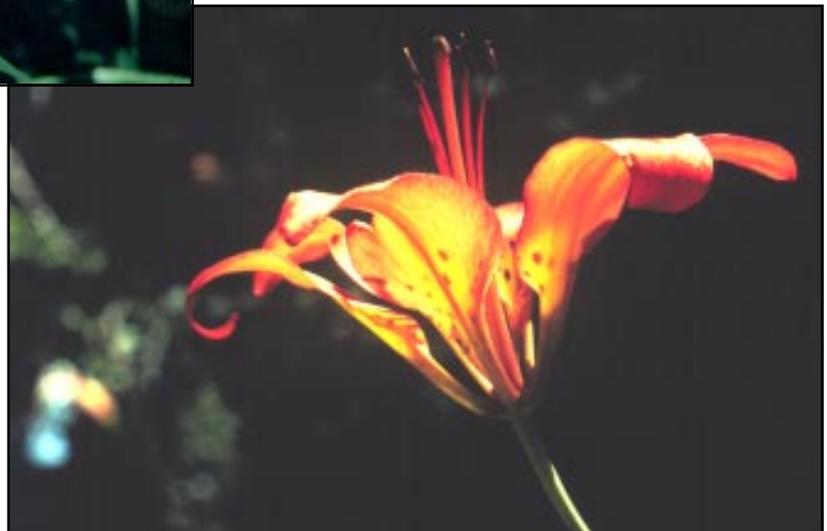
On a slender stalk, the wood lily stands to 40 cm (15 in.). Six petals that are yellowish in the center, changing to bright orange on the outside, make up the flower that adorns the top. At regular intervals down the length of the stalk, grow numerous slender leaves.

Habitat:

Riparian, Ponderosa Pine, Mixed Conifer, Spruce/Fir. The wood lily can be found in canyons above 2,285 m (7,500 ft) and usually occurs in areas of old growth conifers.

Occurrence:

The presence of the wood lily has been confirmed on Los Alamos County, Bandelier National Monument, and Santa Fe National Forest lands.



YELLOW LADY'S SLIPPER

Cypripedium calceolus var. *pubescens*

Status:

State endangered.

Description:

The yellow lady's slipper orchid will stand from 15 to 60 cm (6 to 23.5 in.) tall, topped by one or two large, yellow flowers. The lower segment of the flower is a pouch and resembles a lady's slipper. Three to five yellowish green, elliptic-shaped leaves ascend the stalk, growing out and over at regular intervals.



Habitat:

Riparian, Mixed Conifer. The yellow lady's slipper grows in a variety of moist habitats including bogs, humid woodlands, and rocky slopes in open woods.

Occurrence:

The presence of this orchid has been confirmed on Bandelier National Monument lands only.

Courtesy of Teralene Foxx, LANL





GRAMA GRASS CACTUS

Toumeyia papyracantha

Status:

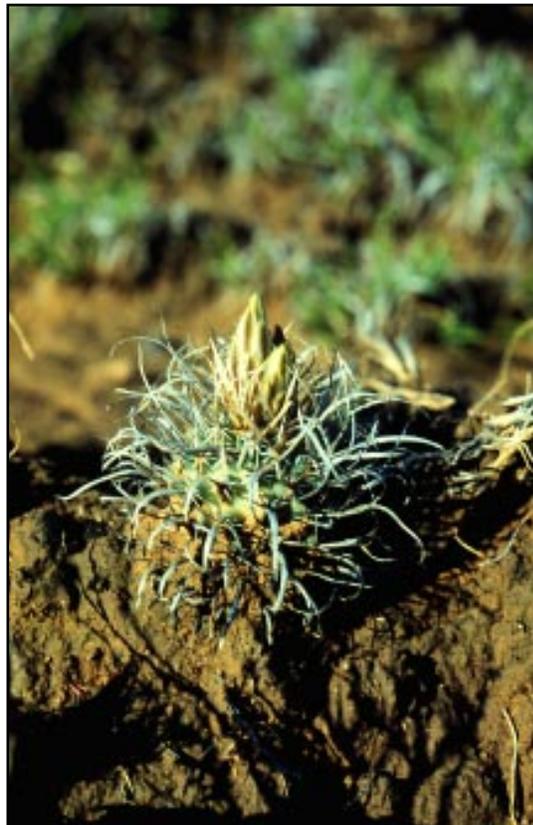
Species of local concern.

Description:

The stems of grama grass cactus are solitary, ribbed, and 2.5 to 20 cm (1 to 8 in.) tall. Central spines elongate, resembling dry grass blades that are flattened, grooved, and flexible. Radial spines are short and straight. Flowers are white and fruit is round, tan, and dry when mature.

Habitat:

Juniper Savanna, Piñon/Juniper. Grama grass cactus can be found from 1,530 to 2,225 m (5,000 to 7,300 ft) in the Jemez Mountains, usually where soil is sandy, and is associated with basalt outcrops.



Occurrence:

The presence of grama grass cactus has been confirmed on Los Alamos County, Bandelier National Monument, and Santa Fe National Forest lands. This cactus has recently been dropped from the list but is still rare in Los Alamos County.

SOUTHWESTERN WILLOW FLYCATCHER

Empidonax traillii extimus

Status:

Federal endangered, State endangered.

Description:

The southwestern willow flycatcher has a whitish throat, pale olive breast, pale yellow belly, and brownish olive upper parts. This bird can be distinguished from peewees, a bird that is similar in appearance, by the upward flicking of the tail feathers.

Habitat:

Riparian. The southwestern willow flycatcher requires cottonwoods or willows. It is generally found in dryer habitat, but near water, than the habitat of the closely related alder flycatcher.

Occurrence:

The presence of the southwestern willow flycatcher has been confirmed in the Jemez Mountains, and there may be possible breeding habitat on Los Alamos National Laboratory and Bandelier National Monument lands.



Courtesy of W. Maynard, New Mexico Game and Fish

GIANT HELLEBORINE

Epipactis gigantea

Status:

Species of local concern.

Description:

The giant helleborine will stand from 20 cm to 1 m (8 to 40 in.) on a single stem. From a rounded base to a tapered point, four to twelve leaves grow in alternating directions along the stem. The greenish-yellow flowers will grow in clusters with up to fifteen flowers on one stem. This plant will flower from March to August.

Habitat:

Riparian, Juniper Savanna, Piñon/Juniper. The giant helleborine can be found on sandbars of rivers and streams and in areas around springs and seeps.

Occurrence:

The presence of the giant helleborine has been confirmed on Los Alamos County lands but not on Los Alamos National Laboratory lands.



Courtesy of Teralene Foxx, LANL

NEW MEXICO MEADOW JUMPING MOUSE

Zapus hudsonius luteus

Status:

Species of concern, State threatened.

Description:

As with all species of jumping mice, the New Mexico meadow jumping mouse is equipped for jumping with long black feet and a long tail. However, it prefers to crawl from place to place under leaves and other vegetation. If hurried, it will run by making a quick series of short hops. Other characteristics of this species are grooved upper incisors and a colorful fur, exhibiting various shades of brown.

Habitat:

Riparian, Mixed Conifer, Spruce/Fir. The meadow jumping mouse prefers to live on ground surface in lush grassy or weedy meadows. By day it hides under heavy vegetation and by night in nests placed in protective areas such as hollow logs or short burrows. The meadow jumping mouse hibernates over the winter.

Occurrence:

The presence of New Mexico meadow jumping mouse has been confirmed on Los Alamos County and Santa Fe National Forest lands and may be possible on Los Alamos National Laboratory lands.



Courtesy of Joan Morrison

GOAT PEAK PIKA

Ochotona princeps

Status:

Species of concern.

Description:

As with all pikas, the Goat Peak pika is a small rodent, 15 to 22 cm (6 to 8.5 in.) in length and weighing from 4 to 6.5 oz. Its grayish buff or brown coloring helps it to blend into the favorite habitat of talus slopes. It has short ears that are broad and rounded and no visible tail.

Habitat:

Mixed Conifer, Spruce/Fir. The Goat Peak pika forages during the early morning, late afternoon, and nighttime hours close to talus slopes, rock slides, or boulder piles that afford protection and nesting areas. Pikas appear to utilize whatever plants are close to their burrows. They eat the leaves, stalks, and flowers of grasses, shrub twigs, and mosses and lichens.

Occurrence:

The presence of the Goat Peak pika has been confirmed on Los Alamos County, Bandelier National Monument, and Santa Fe National Forest lands but not on Los Alamos National Laboratory lands.



Courtesy of James R. des Lauriers

BALD EAGLE

Haliaeetus leucocephalus

Status:

Federal threatened, State threatened.



Description:

The bald eagle is a huge raptor with a wingspan of 2.0 to 2.4 m (6.5 to 7.5 ft). The body plumage is dark, and the head and tail are white. The iris, cere, bill, and legs are yellow. An immature bald eagle is dark, usually with some white under the wings, and gradually develops a white head and tail.

Habitat:

Riparian and adjacent areas. The bald eagle prefers to inhabit areas near rivers and lakes with tall trees and cliffs that are protected from the wind. It eats fish, waterfowl, carrion, and rabbits.

Occurrence:

The bald eagle is a migrant and a winter resident along the Rio Grande and on adjacent Los Alamos National Laboratory, Los Alamos County, Bandelier National Monument, and Santa Fe National Forest lands.

Courtesy of New Mexico Game and Fish



MYOTIS BATS

Family Vespertilionidae

Status:

At least seven species of Myotis bats occur in this area—California myotis, fringed myotis, long-eared myotis, long-legged myotis, small-footed myotis, Yuma myotis, and occult little brown bat. All but the California myotis are considered species of concern, and all but the occult little brown bat have been documented on Los Alamos National Laboratory lands.

Description:

The Myotis bats form the largest group of bats and are widely distributed. They are all relatively small in size, some sort of brown in color, and have simple snouts. Some of the differences in physical characteristics of the Myotis bats in this area can be surmised by their names.



Habitat:

Ponderosa Pine, Piñon/Juniper, Mixed Conifer. The long-eared and long-legged myotis roost in snags of ponderosa pine or mixed conifer and in rock crevices. The others roost in cliffs or caves with occult little brown bat and Yuma myotis needing water close by.

Occurrence:

The presence of all species except the occult little brown bat has been confirmed on Los Alamos National Laboratory, Bandelier National Monument, and Santa Fe National Forest lands. Occult little brown bat has only been seen on Santa Fe National Forest lands.



Courtesy of Teralene Foxx, LANL

WHOOPING CRANE

Grus americana

Status:

Federal endangered, State endangered.



Description:

An adult whooping crane has an all-white plumage with black wingtips and red plumage on the forehead. With long legs and neck, an adult stands at about 132 cm (52 in.). The immature whooping crane is whitish with a reddish-brown head and neck.

Habitat:

River/Streams. The whooping crane roosts on sand bars, often returning to the same location year after year.

Occurrence:

The few remaining whooping cranes migrate along the Rio Grande and Cochiti Reservoir en route to southern New Mexico among flocks of sandhill cranes. These flocks are known to roost overnight in openings on mesas and on sand bars along their route. They are known to fly over but have not been confirmed to stop on Los Alamos National Laboratory lands.

JEMEZ MOUNTAINS SALAMANDER

Plethodon neomexicanus

Status:

Species of concern, State threatened.

Description:

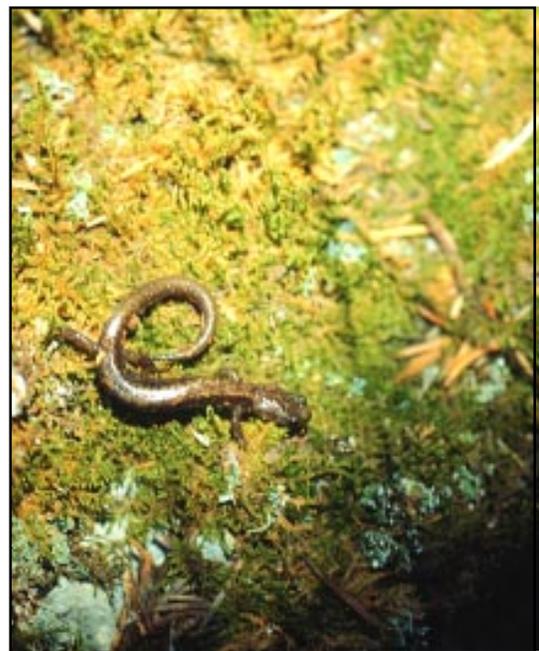
The Jemez Mountains salamander is elongated, from 50 to 110 mm (2 to 5 in.), is brown with fine brassy striping, and has small fore and hind limbs. It can be identified by a hairline furrow that extends from the nostril to the edge of the upper lip.

Habitat:

Mixed Conifer. The Jemez Mountains salamander requires shaded and moist wooded canyon slopes with loose, rocky soils that are at elevations from 2,200 to 2,820 m (7,225 to 9,250 ft.).

Occurrence:

The presence of the Jemez Mountains salamander has been confirmed on Los Alamos County, Bandelier National Monument, and Santa Fe National Forest lands and is believed to be on Los Alamos National Laboratory lands as well.



Courtesy of Teralene Foxx, LANL

PEREGRINE FALCON

Falco peregrinus

Status:

Federal endangered, State endangered.

Description:

The peregrine falcon is a swift-flying raptor with gray and white plumage and a black nape and crown. The crown extends wedge shaped below the eyes, forming a distinctive helmet. An immature peregrine is dark brownish above and heavily streaked below.

Habitat:

Piñon/Juniper, Ponderosa Pine, Mixed Conifer, Riparian, Grassland. The peregrine falcon inhabits canyons with cliffs that are required for breeding. It ranges widely and preys on birds that are captured in flight.

Occurrence:

The peregrine falcon is a migrant and summer resident and has been confirmed on Los Alamos National Laboratory, Bandelier National Monument, Santa Fe National Forest, and Los Alamos County lands.



Corel Professional Photos

LOGGERHEAD SHRIKE

Lanius ludovicianus

Status:

Species of concern.

Description:

The loggerhead shrike resembles a mockingbird in size and appearance but is more bluish grey than the grey of a mockingbird. This bird is big-headed and slim-tailed with a black mask, an all-dark bill, and white, faintly barred underparts. A juvenile acquires adult coloring by the first fall but is paler and barred overall with brownish grey upperparts early on.

Habitat:

Juniper Savanna, Piñon/Juniper, Ponderosa Pine. Loggerhead shrikes prefer areas where they can hunt in fairly open or brushy terrain, diving from a low perch and swooping upward to another perch.

Occurrence:

The presence of the loggerhead shrike has been confirmed on Los Alamos County, Bandelier National Monument, and Santa Fe National Forest lands but not on Los Alamos National Laboratory lands.



Corel Professional Photos

SPOTTED BAT

Euderma maculata

Status:

Species of concern, State threatened.

Description:

The spotted bat carries a unique white spot on its rump and each shoulder. It has huge pink ears and is dark sepia in color.

Habitat:

Riparian, Mixed Conifer, Piñon/Juniper, Ponderosa Pine. The spotted bat roosts in cliff crevices and other situations, often near water with an abundance of moths and other insects in the area.

Occurrence:

The presence of the spotted bat has been confirmed by capture at watering sites on adjacent lands of Bandelier National Monument and Santa Fe National Forest. Habitat and



plant communities favored by the spotted bat are well represented within Los Alamos National Laboratory boundaries, and its distinctive echolocation calls have been heard on Los Alamos National Laboratory lands. The spotted bat has also been observed foraging in mixed Ponderosa Pine and Piñon/Juniper communities in Pueblo Canyon on Los Alamos County property.

Courtesy of Mike Bogan, National Biological Service



BIG FREE-TAILED BAT

Nyctinomops macrotis

Status:

Species of concern.

Description:

The big free-tailed bat is pale brown to black with a tail that extends beyond the tail membrane and ears that join at the midline of the forehead. With a wingspan of up to 42.5 cm (17 in.), this animal can be a swift, powerful flyer.

Habitat:

Piñon/Juniper, Ponderosa Pine, Mixed Conifer. This bat prefers canyon country that is rocky. It will roost in crevices of cliff faces and in rock hollows.

Occurrence:

The big free-tailed bat is a confirmed migrant on Los Alamos County, Bandelier National Monument, and Santa Fe National Forest lands.

FLATHEAD CHUB

Platygobio gracilis

Status:

Species of Concern.

Description:

The flathead chub is a fish that, in New Mexico, typically does not exceed 145 mm (inches) in length. This fish is scaled with an olivaceous colored back and sides that are silver. The head is broad in relation to its slender body and looks somewhat flattened. The dorsal and pectoral fins are sickle-shaped and the anal and pelvic fins are triangular.

Habitat:

The flathead chub can be found in rivers and larger streams with areas of highly turbid waters in moderate to strong currents. This fish is omnivorous but seems to prefer terrestrial insects.

Occurrence:

The flathead chub can be found in portions of the Rio Grande.

GRAY VIREO

Vireo vicinior

Status:

State threatened.

Description:

The plumage of the gray vireo is gray above and white below. There is a white ring around the eye and two bars along the wings. Short wings give this bird the appearance of having a long tail.

Habitat:

Juniper Savanna, Piñon/Juniper, especially on rocky slopes. This bird will forage through the undergrowth, flitting restlessly from place to place and flicking its tail feathers.

Occurrence:

The presence of the gray vireo has been confirmed on Los Alamos County, Bandelier National Monument, and Santa Fe National Forest lands but not on Los Alamos National Laboratory lands.

ZONE-TAILED HAWK

Buteo albonotatus

Status:

Species of local concern.

Description:

The zone-tailed hawk is a long-winged raptor that is black to dark grey in body. When perched, this bird's wingtips will extend back as far as the tail feathers. The wings are also dark in color but with a silvery tint, giving the underwing a two-tone appearance. In flight, it strongly resembles the turkey vulture (*Cathartes aura*). On the tail feathers the male has one wide and one slender whitish band and the female has two slender bands. The legs and the cere are bright yellow.

Habitat:

This buteo is relatively uncommon, but is widely distributed in Latin America and in the southwestern United States. In the US, it is most commonly found in the southern and central portions of Arizona and New Mexico. The zone-tailed hawk prefers mesa or mountain country where there are rivers or streams. Swooping down from a low glide, this hawk will prey upon rodents, lizards, fish, frogs, and small birds.

Occurrence:

The presence of the zone-tailed hawk has been confirmed on Los Alamos National Laboratory and Bandelier National Monument lands.

Information for profiles was derived from *Field Guide to the Birds of North America*, Scott, Ed., 2nd ed., (National Geographic Society, Washington, D. C. 1985); *Western Birds*, Peterson, Ed., 3rd ed., (Houghton Mifflin Company, Boston 1990); *Mammals*, Peterson, Ed., 3rd ed., (Houghton; Mifflin Company, Boston 1980); *Field Guide to Orchids of North America*, Williams and Williams, (Universe Books, New York 1983); *The Encyclopedia of Mammals*, Macdonald, Ed., (Facts on File Publications, New York 1984); *Flowering Plants of the Southwestern Woodlands*, Foxx and Hoard, (Otwi Crossing Press, Los Alamos, New Mexico 1984); ESH-20 field notes; and first-person knowledge from the Ecological Studies Team members of ESH-20.



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